bsm-54471R

[Primary Antibody]

BIOSS ANTIBODIES

www.bioss.com.cn sales@bioss.com.cn techsupport@bioss.com.cn 400-901-9800

mTOR Recombinant Rabbit mAb

- DATASHEET -

Host: Rabbit Isotype: IgG
Clonality: Recombinant CloneNo.: 3A10
GeneID: 2475 SWISS: P42345

Target: mTOR

Immunogen: A synthesized peptide derived from human mTOR:

2400-2480/2549.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50%

Glycerol.

Store at -20°C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the

antibody is stable for at least two weeks at 2-4°C.

Background: mTOR is one of a family of proteins involved in cell cycle

progression, DNA recombination, and DNA damage detection. In rat, it is a 289-kDa protein (symbolized RAFT1) with significant homology to the Saccharomyces cerevisiae protein TOR1 and has been shown to associate with the immunophilin FKBP12 in a rapamycin dependent fashion. The FKBP12-rapamycin complex is known to inhibit progression through the G1 cell cycle stage by interfering with mitogenic signaling pathways involved in G1 progression in several cell types, as well as in yeast. The binding of FRAP to FKBP12-rapamycin correlated with the ability of these ligands to inhibit cell cycle progression.

Applications: WB (1:500-2000)

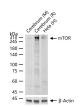
IHC-P (1:50-200) IHC-F (1:50-200) IF (1:50-200) IP (1:20-50)

Reactivity: Human, Mouse, Rat

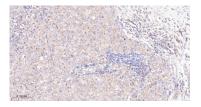
Predicted MW.: 289 kDa

Subcellular Location: Cell membrane ,Cytoplasm

VALIDATION IMAGES



25 ug total protein per lane of various lysates (see on figure) probed with mTOR monoclonal antibody, unconjugated (bsm-54471R) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



Paraformaldehyde-fixed, paraffin embedded Human Breast Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with mTOR Monoclonal Antibody, Unconjugated(bsm-54471R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-

HRP and DAB (C-0010) staining.



Paraformaldehyde-fixed, paraffin embedded Human Kidney; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with mTOR Monoclonal Antibody, Unconjugated(bsm-54471R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.

— SELECTED CITATIONS —

- [IF=5.2] Yong Wei. et al. Network pharmacology and experimental evaluation strategies to decipher the underlying pharmacological mechanism of Traditional Chinese Medicine CFF-1 against prostate cancer. AGING-US. 2024 Mar 31; 16(6): 5387–5411 WB; Human. 38484140
- [IF=4.451] Lei Wang. et al. Neuroprotective effect of Lactobacillus plantarum DP189 on MPTP-induced Parkinson's disease model mice. J Funct Foods. 2021 Oct;85:104635 WB; MOUSE. 10.1016/j.jff.2021.104635

- [IF=3.9] Zhao Zhongwei. et al. Anticancer potential of Bacillus coagulans MZY531 on mouse H22 hepatocellular carcinoma cells via anti-proliferation and apoptosis induction. BMC Complementary Medicine and Therapies. 2023 Dec;23(1):1-9 WB; Mouse. 37705007
- [IF=3.9] Penghui Wang. et al. Enhancing the inhibition of cell proliferation and induction of apoptosis in H22 hepatoma cells through biotransformation of notoginsenoside R1 by Lactiplantibacillus plantarum S165 into 20(S/R)-notoginsenoside R2. RSC ADV. 2023 Oct;13(42):29773-29783 WB; Mouse. 37829710
- [IF=3.8] Chunhong Liu. et al.Anticancer activity of Weizmannia coagulans MZY531 on H22 tumor-bearing mice by regulating inflammation, autophagy-dependent apoptosis, and gut microbiota. scientific reports. 2025 Mar 10;15(1):8250. Western blot; Mouse. 4006505